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ABSTRACT

[1084] A method and apparatus to perform position determination in a wireless (e.g., cellular) communication network with repeaters. A signal received by a terminal is initially identified as being from a repeater. A position and a position uncertainty for the identified repeater are obtained (e.g., from a repeater database) and provided as the position estimate and position uncertainty for the terminal if (1) a more accurate position estimate for the terminal cannot be obtained, (2) the terminal is deemed to be in an indoor environment, or (3) the terminal is located sufficiently close to the identified repeater. If information for additional delays associated with the identified repeater is available, then the position estimate for the terminal may be derived based on a "compensated" time measurement for the identified repeater (i.e., with the additional delays removed) and time measurements for at least two other transmitters received by the terminal.